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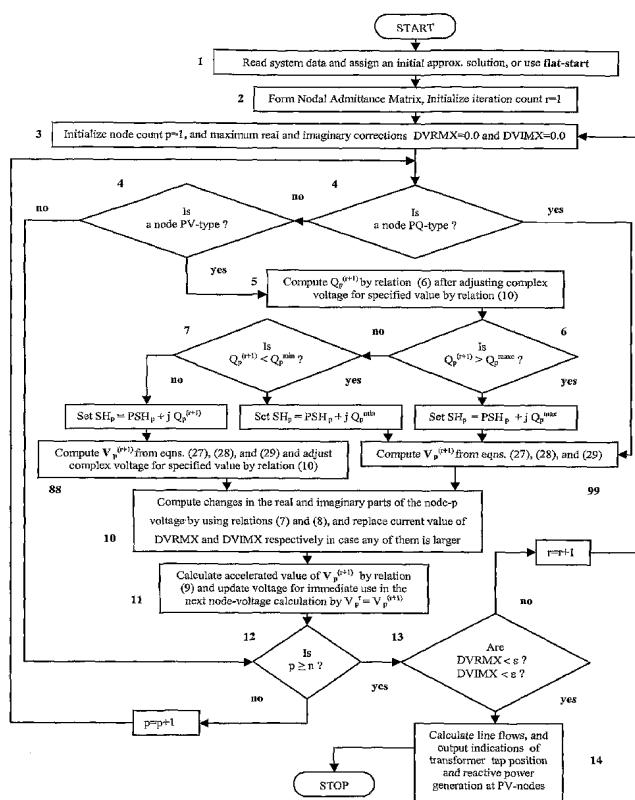
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- of inventorship (Rule 4.17(iv))

[Continued on next page]

(54) Title: SYSTEM AND METHOD OF PARALLEL LOADFLOW COMPUTATION FOR ELECTRICAL POWER SYSTEM



(57) **Abstract:** A method for performing load flow computations for controlling voltages and power flow in a power network by optimizing the power network operations. On-line power data is obtained about the present condition of the switches/circuit breakers and load-flow computation is carried out for controlling power flow using a control means, so that no component of the power network is overloaded as well as for controlling voltages so that there is no overvoltage/undervoltage at any nodes in the network following a small or large disturbances.

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